

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
1 February 2001 (01.02.2001)

PCT

(10) International Publication Number
WO 01/08061 A1

(51) International Patent Classification⁷:

G06F 17/60

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(21) International Application Number:

PCT/KR00/00794

(22) International Filing Date:

24 July 2000 (24.07.2000)

(25) Filing Language:

Korean

(26) Publication Language:

English

(30) Priority Data:

1999/30270

24 July 1999 (24.07.1999)

KR

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant and

(72) Inventor: JEONG, Yong-Seok [KR/KR]; 778-4 Jayang 1-dong, Kwangjin-ku, Seoul 143-191 (KR).

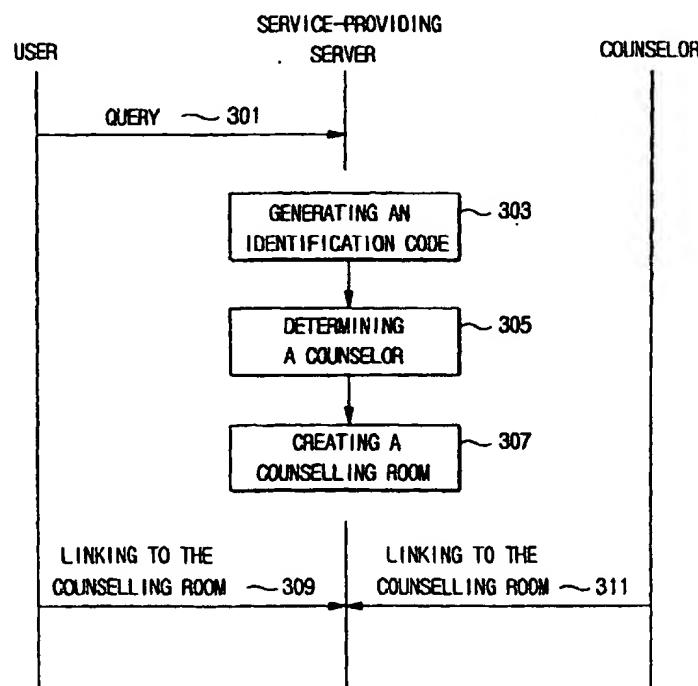
Published:

— With international search report.

(74) Agent: LEE, Kyeong-Ran; 502 BYC Building, 648-1 Yeoksam 1-dong, Gangnam-ku, Seoul 135-081 (KR).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR PROVIDING NETWORK BASED COUNSELING SERVICE



(57) Abstract: Method and system for providing a real-time counseling service using a network. User clicks on the counseling link, when he wish to interactive counseling service during he surfing shopping site or contents site on Internet. If the counseling link is clicked on, an identification code is generated, which represents at least one of the user-related information; the counseling link related information such as the web page including the counseling link and the site address; and the user activity information. The identification code is transmitted to a counseling server which selects a counselor and generates the basic counseling information to be sent to the counselor, based on the identification code. In addition, the counseling server provides the counseling room in which the user and the counselor can engage in interactive counseling by using at least one selected from the group consisting of text, picture, voice and picture board. The identification code includes at least one selected from the group consisting of the language information, the contents-providing server's information, the category

WO 01/08061 A1

information and the counseling server's information. The counseling room provided for the counselor may include a help button. If the counselor selects the help button, the information regarding the counseling would be transmitted to a professional counselor and the professional counselor enters the counseling room.

METHOD AND APPARATUS FOR PROVIDING NETWORK BASED COUNSELING SERVICE

Technical Field

5 The present invention relates to a method and system for a real-time counseling service that is based on a network including the Internet.

Background Art

10 Several counseling methods have been attempted using the Internet, electronic mail (E-mail), the telephone and similar means.

The Internet counseling methods used have been the question and answer (Q&A) method and the frequently asked question (FAQ) method, which involve the use of a bulletin board for requests of users.

15 With the Q&A method, a counselor writes answers to questions written by users on a bulletin board. The advantage of the Q&A method is that it provides answers to specific questions of users. However, one problem with the Q&A method is that user's questions cannot be answered in real time.

20 With the FAQ method, users are provided with answers to frequently asked questions that have already been posed. One problem with this method is that it provides nothing except answers or advice concerning previously asked questions.

With the Q&A and the FAQ methods, the user is restricted to the language provided by the site by means of the Q&A or FAQ method of answering questions. That is, with the Q&A method or the FAQ method, there can be no bilateral communication and prompt responses to questions. Consequently, another problem with the Q&A method and the FAQ

method is that those methods are not able to provide the user with information through interactive communication with a counselor.

One other drawback of counseling by E-mail is that the user and the counselor are not able to communicate directly in real time.

5 Also, another problem with counseling by telephone is that a counselor is not able to make use of various visual materials because the user and the counselor communicate only with spoken language.

Disclosure of the Invention

10 The present invention is intended to overcome the above-mentioned disadvantages of counseling services using the Internet, electronic mail (E-mail) and the telephone. Therefore, it is an object of the present invention to provide a method and system for providing a real-time counseling service by using a network that provides users with a direct interactive counseling service whenever they require guidance.

15 It is another object of the present invention to provide a method and system for providing a real-time counseling service that makes use of multimedia.

It is still another object of the present invention to provide a method and system for providing a real-time counseling service that enables a user and a counselor to engage in counseling in the same counseling room in real time.

20 It is still another object of the present invention to provide a method and system for providing a real-time counseling service that analyzes queries (regarding purchases from electronic business, counseling, information retrieval, etc.) in order to generate an identification code for the user, which will include at least one selected from the group consisting of the language information, the contents-providing server's information, the

query-contents identification, the user's location information, the counseling server's information and the service-providing server's information.

It is still another object of the present invention to provide a method and system for providing a real-time counseling service that utilizes the interactivity and communication speed which are principal advantages of the Internet.
5

It is still another object of the present invention to provide a method and system for providing a real-time counseling service that increases the efficiency of counseling through enabling a user and a professional counselor to communicate interactively.

It is still another object of the present invention to provide a method and system
10 for providing a real-time counseling service for users carrying on electronic business, providing such users with direct links to electronic business malls related to their requests in counseling rooms.

It is still another object of the present invention to provide a method and system for providing a real-time counseling service that overcomes language barriers by linking
15 users with a counselor who can communicate in a user's preferred language.

To achieve the said objects, one part of the preferred embodiment of the present invention is a method for providing a real-time counseling service by using a network, which comprises the steps of: (1) receiving a query from a user; (2) generating an identification code corresponding with said query; (3) determining a counselor using said identification code; (4) creating a counseling room in which said user and said counselor
20 are able to engage in interactive counseling, wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification and a user's location information.

Moreover, the language information is the language corresponding to the query.

The service-providing server's information is a domain name (URL) of the service-providing server. The query-contents identification is a query-contents category number that said query belongs to among a plurality of query-contents categories. In addition, the user's location information is a user's connection control information.

5 Moreover, the step of determining a counselor using said identification code is the step of determining a counselor using said language information and said query-contents identification.

Moreover, the counseling room is a cyber space in which said user and said counselor are able to engage in interactive counseling by using said query and said 10 identification code in real time. Alternatively, the counseling room is a chat room, where said chat room corresponds with said query and said user is able to carry on electronic business (e-business) by using URLs of electronic business malls that are provided in said chat room.

Another part of the preferred embodiment of the present invention is a method for 15 providing data for creating a counseling room at a service-providing server, where said service-providing server is coupled with a counseling server that provides a user with said counseling room by using a network, which comprises the steps of: (1) receiving a query from said user; (2) generating an identification code corresponding with said query; (3) transmitting said query and said identification code to said counseling server, where said 20 counseling server determines a counselor using said identification code and creates a counseling room for counseling between said user and said counselor, wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification, a user's location information and a counseling-server's information.

Moreover, the language information is the language corresponding with said query. The service-providing server's information is a domain name (URL) of the service-providing server. The query-contents identification is a query-contents category number that said query belongs to among a plurality of query-contents categories. In addition, the 5 user's location information is a user's connection control information.

Moreover, to determine a counselor using said identification code is to determine a counselor using said language information and said query-contents identification.

Moreover, the counseling room is a cyber space in which said user and said counselor are able to engage in interactive counseling by using said query and said 10 identification code in real time. Alternatively, the counseling room is a chat room, where said chat room corresponds with said query and said user is able to carry on electronic business (e-business) by using URLs of electronic business malls that are provided in said chat room.

Still another part of the preferred embodiment of the present invention is a method 15 for providing a user with a counseling room at a counseling server, where said counseling server is coupled with a service-providing server by using a network, which comprises the steps of: (1) receiving a query and an identification code from said service-providing server, where said query has been received from said user by said service-providing server and said identification code is generated at said service-providing server corresponding with said query; (2) determining a counselor using said identification code; (3) creating a 20 counseling room in which said user and said counselor are able to engage in interactive counseling, wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification, a user's location information and a counseling server's information.

Moreover, the language information is the language corresponding with said query. The service-providing server's information is a domain name (URL) of the service-providing server. The query-contents identification is a query-contents category number that said query belongs to among a plurality of query-contents categories. In addition, the user's location information is a user's connection control information.

Moreover, the step of determining a counselor using said identification code is the step of determining a counselor using said language information and said query-contents identification.

Moreover, the counseling room is a cyber space in which said user and said counselor are able to engage in interactive counseling by using said query and said identification code in real time. Alternatively, the counseling room is a chat room, where said chat room corresponds with said query and said user is able to carry on electronic business (e-business) by using URLs of electronic business malls that are provided in said chat room.

Still another part of the preferred embodiment of the present invention is an apparatus for providing a real-time counseling service by using a network, which comprises: (1) receiving means for receiving a query from a user; (2) controlling means for generating an identification code corresponding with said query, determining a counselor using said identification code and creating a counseling room in which said user and said counselor are able to engage in interactive counseling, wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification and a user's location information.

Still another part of the preferred embodiment of the present invention is an

apparatus for providing data for creating a counseling room, where said apparatus is coupled with a counseling server that provides a user with said counseling room by using a network, which comprises: (1) receiving means for receiving a query from said user; (2) generating means for generating an identification code corresponding with said query; (3) 5 transmitting means for transmitting said query and said identification code to said counseling server, where said counseling server determines a counselor using said identification code and creates a counseling room in which said user and said counselor are able to engage in interactive counseling, wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing 10 server's information, a query-contents identification, a user's location information and a counseling server's information.

Still another part of the preferred embodiment of the present invention is an apparatus for providing a user with a counseling room, where said apparatus is coupled with a service-providing server by using a network, which comprises: (1) receiving means 15 for receiving a query and an identification code from said contents-providing server, where said query has been received from said user by said service-providing server and said identification code is generated at said service-providing server corresponding with said query; (2) controlling means for determining a counselor using said identification code, creating a counseling room in which said user and said counselor are able to engage in 20 interactive counseling, wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification, a user's location information and a counseling server's information.

Still another part of the preferred embodiment of the present invention is an

apparatus for providing a real-time counseling service by using a network, which comprises: (1) a storage device; (2) a processor coupled to said storage device, said storage device storing a program for controlling said processor; and said processor operative with said program to receive a query from a user; generate an identification code corresponding with said query; determine a counselor using said identification code; create a counseling room in which said user and said counselor are able to engage in interactive counseling, wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification and a user's location information.

Still another part of the preferred embodiment of the present invention is an apparatus for providing data for creating a counseling room, where said apparatus is coupled with a counseling server that provides a user with said counseling room by using a network, which comprises: (1) a storage device; (2) a processor coupled to said storage device, said storage device storing a program for controlling said processor; and said processor operative with said program to receive a query from said user; generate an identification code corresponding with said query; transmit said query and said identification code to said counseling server, where said counseling server determines a counselor using said identification code and generates a counseling room in which said user and said counselor are able to engage in interactive counseling, wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification, a user's location information and a counseling server's information.

Still another part of the preferred embodiment of the present invention is an apparatus for providing a user with a counseling room, where said apparatus is coupled

with a service-providing server by using a network, which comprises: (1) a storage device; (2) a processor coupled to said storage device, said storage device storing a program for controlling said processor; and said processor operative with said program to receive a query and an identification code from said service-providing server, where said query has been received from said user by said contents-providing server and said identification code is generated at said service-providing server corresponding to said query; determine a counselor using said identification code; create a counseling room in which said user and said counselor are able to engage in interactive counseling, wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification, a user's location information and a counseling server's information.

Still another part of the preferred embodiment of the present invention is a method for providing a real-time counseling service at a contents-providing server by using a network, which comprises the steps of: (1) providing at least one page in a site corresponding with said contents-providing server, having at least one counseling link; (2) when said counseling link is selected by a user, generating an identification code corresponding with said counseling link; (3) transmitting said identification code to a counseling server corresponding with said counseling link, wherein said counseling server determines a counselor using said identification code and provides a counseling room in which said user and said counselor are able to engage in interactive counseling.

Moreover, the identification code includes at least one selected from the group consisting of a language information, a contents-providing server's information, a category information and a counseling server's information. Alternatively, the identification code further includes user-related information.

Still another part of the preferred embodiment of the present invention is a method for providing a real-time counseling service by using a network, which comprises the steps of: (1) receiving an identification code corresponding with a counseling link selected by a user from a contents-providing server, wherein said identification code includes at least one selected from the group consisting of a language information, a contents-providing server's information, a category information and a counseling server's information; (2) determining a counselor using said identification code; (3) creating a counseling room in which said user and said counselor are able to engage in interactive counseling.

Moreover, the method further comprises the steps of: (4) retrieving a basic counseling information using said identification code; (5) providing said user with said basic counseling information.

Moreover, a chatting service is provided, where said chatting service is based on at least one selected from the group consisting of text, voice, picture board and picture.

Moreover, the method further comprises the steps of: (6) receiving a help request and a help contents from said user; (7) determining a professional counselor using said help contents; (8) linking said professional counselor with said counseling room; (9) transmitting at least said basic counseling information to said professional counselor.

Brief Description of the Drawings

The above objects and other advantages of the present invention will become more apparent in detailed descriptions of the preferred embodiments thereof with reference to the attached drawings, in which:

FIG. 1a is a rough illustration of the service-providing system based on a network in accordance with one preferred embodiment of the present invention;

FIG. 1b is a rough illustration of the service-providing system based on a network in accordance with another preferred embodiment of the present invention;

FIG. 2a is a roughly illustrates the system shown in FIG. 1a coupled to the contents-providing server;

5 FIG. 2b is a roughly illustrates the system shown in FIG. 1b coupled to the contents-providing server;

FIG. 3 is a flow chart illustrating the method by which counseling services are provided on a network in accordance with one preferred embodiment of the present invention;

10 FIG. 4 is a flow chart illustrating the method by which counseling services are provided on a network in accordance with another preferred embodiment of the present invention;

FIGS. 5a – 5d are graphs illustrating the identification code in accordance with one preferred embodiment of the present invention;

15 FIG. 6 is an illustration of the counseling room in accordance with one preferred embodiment of the present invention;

FIG. 7 is an illustration of the counseling room in accordance with another preferred embodiment of the present invention;

20 FIG. 8 is an illustration of the counseling room in accordance with still another preferred embodiment of the present invention;

FIGS. 9 – 11 illustrate methods for requesting help in the counseling room.

Best Modes for carrying out the Invention

Hereinafter, preferred embodiments of the present invention will be described in

more detail with reference to the accompanying drawings, but it is understood that the present invention should not be limited to the following embodiments.

FIG. 1a is a rough illustration of the service-providing system based on a network in accordance with one preferred embodiment of the present invention.

Referring to FIG. 1a, the service-providing system (hereinafter referred to as the service-providing server) 101 comprises a database 103, and it is coupled to a user computer 107 and a counselor computer 109 via the communication network 105. The communication network 105 comprises the Internet, a mobile communication network, a PSTN and similar means.

The service-providing server 101 has links to all sites concerning which users may request counseling, such as shopping malls, contents-providing sites and similar sites. In general, a user may link to the service-providing server 101 via a communication network 105 and carry on various activities. For a concrete example, an illustration of how a user might link to a shopping mall site will be provided. The user may access a page in a site for purchasing goods by retrieving the database 103 and selecting the category that the goods belong to. In this manner, in accordance with one preferred embodiment, a counseling link may be included in the page in the site where the purchasable goods are listed. When the user wants advice instantly about the goods, he/she may click on the counseling link. When the user clicks on the counseling link, the service-providing server 101 determines a proper counselor among various counselors related to the selected counseling link. When the proper counselor is determined, the service-providing server 101 provides a counseling room in which the user and the counselor can engage in interactive counseling in real time. The counseling room may be created at the user's request. Alternatively, the counseling room may be created in advance and allocated to the counselor. Then the user may be

linked to the counseling room.

At this point, the service-providing server 101 also provides the user with basic counseling information in order to simplify counseling. That is, the page displayed in the counselor's screen may further include an area in which basic counseling information is
5 displayed, in contrast with a page displayed in the user's screen.

This basic counseling information may be on the page the user accesses just before clicking on the counseling link or included on the record of the user's activity after linking to the service-providing server 101 up to the point of clicking on the counseling link. In addition, the basic counseling information may include general examples of counseling
10 related to the page in the site.

Because the counseling service provided by the service-providing server 101 generally has a standard form, the basic counseling information may be known to those skilled in the art. So, a concrete description may be skipped.

As a concrete example, I will illustrate the case of a user who links to a shopping
15 mall site and clicks on the counseling link related to electronic goods in order to get information about purchasing a 30-inch television. When the user clicks on the counseling link, the service-providing server 101 generates the identification code fixed in advance in relation to the counseling link. The service-providing server 101 may provide information of in a quantity ranging from tens of pages to thousands pages. Each page may include at
20 least one counseling link. To use this example, the television purchase page may include at least one counseling link or the counseling links may be organized to correspond with particular goods. Of course, the pages (or areas of the site) where no counseling is needed may not include a counseling link.

The service-providing server 101 retrieves the database 103 by using the

counseling link (or the identification code corresponding to the counseling link), generates basic counseling information and, at the same time, determines the proper counselor.

At this point, a concrete description will be given of the basic counseling information provided to the counselor.

5 It is reasonable that for proper counseling the counselor should know some general user-related information. Accordingly, the basic counseling information may include such information as the page(s) (or area[s] of a site) which a user is accessing or has accessed, the goods which the user wishes to purchase (or has purchased), information about the user, and a delivery address in case of shopping malls and similar information. The user-related 10 information may be derived from a member information database. In addition, when the counseling link is clicked on, it is advantageous for the counselor to know information about which page (or area of a site) of the service-providing server 101 includes the counseling link that the user selected, what categories the page included, what information the user asked for, and what previous answers were given to the user's questions. These 15 data may be managed systematically by organizing the database based on the counseling link. This manner of counseling is also apparent to those skilled in the art.

Accordingly, basic counseling information may be obtained by retrieving a database using a counseling link (and/or the user ID). Also, the basic counseling information may be obtained by using the user's record information, such as by inputting a 20 retrieval query for information about the pages the user has accessed at the service-providing server 101.

The case mentioned above is one of the user simply clicking on the counseling link only. I will illustrate in detail a different way in which a user may enter concrete query-contents.

In accordance with another preferred embodiment of the present invention, when a user transmits a query to the service-providing server 101 (for example, concerning counseling, data retrieval or a purchase from an electronic business), the service-providing server 101 receives the query and uses the database 103 to generate an identification code 5 corresponding with the query. A concrete description of the identification code will be given.

Then, the service-providing server 101 determines the proper counselor corresponding to the query (or the queries) by using the identification code. A concrete description of the method for determining the proper counselor will be given.

10 Then, the service-providing server 101 creates a counseling room in which the user and the proper counselor can engage in interactive counseling in real time while viewing the same page (or area of a site). In accordance with one preferred embodiment of the present invention, the counseling room may be the chat room. A concrete description of the counseling room will be given.

15 FIG. 1b is a rough illustration of the service-providing system based on a network in accordance with another preferred embodiment of the present invention.

Referring to FIG. 1b, the service-providing system (hereinafter referred to as the service-providing server) 101 comprises a database 103, which is coupled to a user's computer 107, a counseling system (hereinafter referred to as the counseling server) 111 20 and a counselor's computer 109 via the communication network 105. The communication network 105 comprises the Internet, a mobile communication network, a PSTN and similar means.

When the user transmits a query to the service-providing server 101 (for example, concerning counseling, data retrieval or a purchase from an electronic business), the

service-providing server 101 receives the query and generates an identification code corresponding with the query by using the database 103. A concrete description of the identification code will be given.

Then, the service-providing server 101 transmits the query and the identification
5 code to the counseling server 111.

The counseling server 111 uses the identification code to determine a proper counselor corresponding with the query. A concrete description of the method for determining the proper counselor will be given.

Then, the counseling server 111 creates a counseling room in which the user and
10 the proper counselor can engage in interactive counseling in real time while viewing the same page (or area of a site). In accordance with one preferred embodiment of the present invention, the counseling room may be a chat room. A concrete description of the counseling room will be given.

FIG. 2a is a rough illustration of the system shown in FIG. 1a coupled to the
15 contents providing server.

Referring to FIG. 2a, the service-providing server 101 is further coupled to a contents-providing system (hereinafter referred to as the contents-providing server) 113 via the communication network 105 in addition to being connected to a database 103, the user's computer 107 and the counselor's computer 109 as illustrated in FIG. 1a.

20 A description of the items described referring to FIG. 1a will be omitted.

When the user and the counselor link to the counseling room and wish to be provided with contents, the contents-providing server 113 provides the contents. The contents-providing server 113 may be included in the service-providing server 101 in accordance with another preferred embodiment of the present invention.

FIG. 2b is a rough illustration of the system shown in FIG. 1b coupled to the contents-providing server.

Referring to FIG. 2b, the service-providing server 101 is further coupled to a contents-providing system (hereinafter referred to as the contents-providing server) 113 via 5 a communication network 105 in addition to being connected to the database 103, the user's computer 107 and the counselor's computer 109 as illustrated in FIG. 1b.

A description of the items that are described referring to FIG. 1b will be omitted.

When the user and the counselor link to the counseling room and wish to be provided with contents, the contents-providing server 113 provides the contents. The 10 contents-providing server 113 may be included in the service-providing server 101 in accordance with another preferred embodiment of the present invention.

FIG. 3 is a flow chart illustrating the method by which counseling services are provided based on a network in accordance with one preferred embodiment of the present invention.

15 Referring to FIG. 3, the user transmits a query (for example, concerning counseling, data retrieval or a purchase from an electronic business) to the service-providing server (Step 301).

The service-providing server receives the query transmitted from the user, and then generates an identification code corresponding to the query (Step 303).

20 A concrete description of the identification code will be given referring to FIG. 5a – FIG. 5d.

FIGS. 5a – 5d are graphs illustrating the identification code in accordance with one preferred embodiment of the present invention.

Referring to FIG. 5a, the first identification code 501 includes such information as

the service-providing server's information 503, the query-contents identification 505, and the user's location information 507. The first identification code may be applied in the case of the system illustrated in FIG. 1a.

The service-providing server's information 503 means the IP address of the 5 service-providing server. Alternatively, the service-providing server's information 503 is the Media Access Control (MAC) address of the service-providing server, in accordance with another preferred embodiment of the present invention.

The query-contents identification number 505 is a query-contents category number that the query belongs to among a plurality of query-contents categories. That is, the query-10 contents identification number 505 indicates the category of the query received from the user , which is one among many query categories.

Referring to FIG. 1a again, the service-providing server 101 comprises the database 103, where the query categories are fixed and stored in advance. The query categories comprise a plurality of large-scale categories, such as politics, art, sports, and 15 electronic business. Each large-scale category comprises a plurality of small-scale categories. These categories are organized hierarchically and the categories lower in the hierarchy include the identification of those higher in the hierarchy. A unit hierarchy includes all the identification of a plurality of higher categories and is allocated an identification that distinguishes it from other unit hierarchies.

20 The proper counselor's information corresponding to each unit category is fixed and stored in the database 103 in advance. The counselor information comprises information such as the counselor's name, address, gender, professional field, telephone number, fax number, e-mail address, and/or homepage URL.

The service-providing server 101 receives a query from a user and, by recognizing

the query, allocates a query-contents identification 505 to the unit hierarchy's identification number that identifies the query.

The user's location information 507 comprises the user's IP address and the port number that is assigned by the user's link to the service-providing server 101.

5 Referring to FIG. 5b, the second identification code comprises the language information 511 in addition to the service-providing server's information 503, the query-contents identification 505 and the user's location information 507 illustrated in FIG. 5a.

10 The language information 511 relates to the user's language. The service-providing server assigns a code corresponding with the relevant language by recognizing the language of the query transmitted from the user. For example, when the user inputs a query using the English word "computer", the service-providing server recognizes the query word as an English type and assigns a code (for example, 001) corresponding with the relevant language type. In addition, the language information 511 may be a code corresponding with the principal language of a page (or area at a site) that the user is 15 accessing or has accessed, or corresponding with a page (or area at a site) where the counseling link is located. In accordance with still another preferable embodiment of the present invention, the language information 511 may be a code corresponding with the primary language (or counseling language) that the user has specified in their member information.

20 In accordance with another preferable embodiment of the present invention, there is a button with which the user can select a language in the contents provided by the service-providing server. When the user clicks on the special button corresponding with their particular language by using the contents provided, the service-providing server recognizes the input from that the specific button and assigns a code fixed in advance,

which corresponds with the button for the language information 511. For example, when the user wishes for advice in Korean while he/she is linked to a page in English in order to get information about goods or to purchase goods, the user can select Korean as a counseling language even though the primary language is English. In this way, the convenience of the counseling service to users is increased.

In the database 103, the information about counselors that is organized in relation to unit hierarchies may be further organized according to the languages of counselors. For example, when the unit hierarchy of a query-contents category is designated by the term "computer" and there are various relevant counselors, the counselors may then be sorted by language and listed, for example, as Hong Gildong(Korean), Tanaka(Japanese), Gonglee(Chinese), and Michael Jackson(English). When there is a plurality of qualified counselors, a counselor may be assigned to a user on the basis of their language.

Referring to FIG. 5c, the third identification code 513 comprises the counseling server information 515 in addition to the service-providing server's information 503, the query-contents identification 505, the user's location information 507 and the language information 511. The third identification code 513 may be applied in the case of the system illustrated in FIG. 2a.

The counseling server's information 515 consists of the IP address of the counseling server that provides the counseling room. In accordance with another preferred embodiment of the present invention, the counseling server's information 515 consists of the MAC address of the counseling server.

Referring to FIG. 5d, the fourth identification code 517 comprises the contents providing server's information 519 in addition to the service-providing server's information 503, the query-contents identification 505, the user's location information 507,

the language information 511 and the counseling server's information 515. The fourth identification code 517 may be applied in the case of the system illustrated in FIG. 2b.

The contents-providing server's information 519 consists of the IP address of the contents-providing server that provides the user or the counselor with contents or information when they need special information or contents in the service-providing server or counseling server. In accordance with another preferred embodiment of the present invention, the contents-providing server's information 519 consists of the MAC address of the contents-providing server.

Referring to FIG. 3 again, the service-providing server generates the identification code and determines a counselor who corresponds with the query transmitted from the user (Step 303, step 305). When the service-providing server determines the counselor, the service-providing server uses the identification code generated at step 303. The service-providing server selects the counselor connected to the unit hierarchy of the query-contents category that corresponds with the query from the database by recognizing the query transmitted from the user. Then, or at the same time as the previous process, the service-providing server recognizes the language of the query transmitted from the user and makes a final selection of the counselor who corresponds with the language of the query among the plurality of counselors. When there is more than one counselor corresponding with the query-contents identification and the language information, the service-providing server may determine the counselor in accordance with an order fixed in advance. In accordance with another preferred embodiment of the present invention, when the counselors corresponding with the query-contents identification and the language information are plural, the service-providing server may finally select the counselor at random.

After the service-providing server determines the counselor in the step 305, the

service-providing server creates a counseling room (Step 307). A concrete description of the counseling room will be given by referring to FIG. 6.

FIG. 6 is an illustration of the counseling room in accordance with one preferred embodiment of the present invention.

5 Referring to FIG. 6, the counseling room 601 may be a chat room in accordance with one preferred embodiment of the present invention. The counseling room 601 should be a cyber space in which the user and the counselor can engage in interactive counseling at the same time while viewing the same page (or area at a site).

10 The counseling room 601 includes a contents input area 603, a contents display area 605, and an information area 607.

The contents input area 603 is the area where the user or the counselor inputs what he/she wishes to express. The user or the counselor may input what he/she wishes to express after clicking on the input window with the mouse.

15 The contents display area 605 is the area where all the contents of the dialogue between the user and the counselor are displayed.

The information area 607 is the area where the user or the counselor retrieves data by double-clicking on the mouse button after inputting a specific word (or blocking out specific text) about which they wish to know detailed information. The retrieved information is then displayed in the contents display area 605 or the contents input area 603, expressing detailed information abstracted from the database or the contents-providing server.

Referring to FIG. 6 again, when the counselor requests information on a □□ maker among a plurality of notebook makers, a URL of the □□ maker such as http://www.***.com and simple information may be displayed in the information area 607.

The user may move to the homepage of the maker directly by using the displayed URL. When the homepage is related to an electronic business (e-business), the user may carry on electronic business (e-business) using the homepage directly.

FIG. 7 is an illustration of the counseling room in accordance with another 5 preferred embodiment of the present invention.

Referring to FIG. 7, a dialogue type of counseling may be carried out in the counseling room with the help of pictures. A user's image 701 may be a live image, a still picture, or an avatar. A live image may be transmitted from a camera attached to the user's communication terminal (for example, their computer, cellular phone, PDA, or IMT 2000 10 terminal). A still picture or an avatar may be what the user inputs himself/herself or what the user selects from among the still pictures and avatars provided by the service-providing server 101 or the counseling server. Similarly, the counselor's image 702 may be a live image, a still picture or an avatar. Because the contents display area 605 and the contents input area 603 are designed for a chat service based on text, their descriptions are the same 15 as in case of FIG. 6. Accordingly, descriptions of them will be omitted.

In accordance with one preferred embodiment of the present invention, the basic counseling information area 705 is displayed on the counselor's screen only. In the basic counseling information area 705, basic information for counseling may be displayed. The basic information for counseling may comprise such information as user information, the 20 user's activities before clicking on the counseling link, FAQ the user is expected to ask, and the access page (or area of a site) where the user clicked on the counseling link.

FIG. 8 is an illustration of the counseling room in accordance with still another preferred embodiment of the present invention.

Referring to FIG. 8, the page (or area of the site) further includes a picture board

707 and picture tool menu 709, as are also seen in the illustration in FIG. 7. Therefore, a description of the items described referring to FIG. 7 will be omitted. The picture board 707 is an area displayed to both the counselor and the user. The contents of a counseling session can be expressed better through the use of a picture tool menu 709. Both the user 5 and the counselor may enter input into the picture board 707 using it for such purposes as drawing, deleting pictures, and inserting text.

The counseling room described referring to FIG. 6 – FIG. 8, may be provided in a separate window from the main page (namely, the page including the counseling link, hereinafter referred to as the information page) provided by the service-providing server. 10 The information page and the counseling room are provided in one window. Otherwise, the counseling room may be substituted for the information page.

Referring to FIG. 3 again, the service-providing server makes the user and the counselor link to the counseling room after performing Step 307 (Step 309, step 311).

In accordance with another preferred embodiment of the present invention, Step 15 307 and Step 309 may be performed after Step 301 has been performed.

FIG. 4 is a flow chart illustrating the method by which counseling services are provided based on a network in accordance with another preferred embodiment of the present invention.

Referring to FIG. 4, the service-providing server transmits a received query and an 20 identification code generated to a counseling server (Step 405). A description of the identification code that is also described above will be omitted.

The counseling server determines a counselor after it has received the query and the identification code transmitted from the service-providing server (Step 407). For determining the counselor, the counseling server may be provided with needed data from

the database included in the service-providing server. In accordance with another preferred embodiment of the present invention, the counseling server may include the database itself.

A description of the method described above for determining the counselor will be omitted.

5 The counseling server creates a counseling room, after performing Step 407 (Step 409). A description of the counseling room and creating process of the counseling room that are described above will be omitted.

Then, the counseling server makes the user and the counselor link to the counseling room (Step 411, step 413).

10 The present invention is particularly useful, when one (hereinafter referred to as the shopping mall manager) who manages a small-scale shopping mall and a small-scale contents providing site, wishes to manage the counseling corner. A concrete description will now be given.

15 The shopping mall manager transmits an identification code and/or basic counseling information to the counseling server. Here, the identification code may be a code that includes information at least for abstracting the basic counseling information and determining a counselor. In addition, the identification code may include additional information due to the counseling service that provides, such as the counselor ID, the site address that the counselor belongs to, and the site address requested for counseling.

20 When the basic counseling information is retrieved and generated at the counseling server, the counseling server should renew a database that it manages by monitoring the site that can be requested for counseling, for providing better quality service.

A description about the professional counseling will now be given.

FIG. 9 – FIG. 11 illustrate methods for requesting help in the counseling room.

Referring to FIG. 9 – FIG. 11, a counselor may select the help button 901, when a query is received from a user during a counseling session that the counselor cannot answer. In this case, the principal matters concerned in the counseling are transmitted to a professional counselor and the same counseling room is opened to the professional counselor. In accordance with another preferred embodiment of the present invention, the query-contents that the counselor could not answer are displayed for the professional counselor. In addition, the present invention enables the user to recognize or not to recognize the existence of the professional counselor.

Although the present invention has been described in terms of various embodiments, it is not intended that the invention be limited to these embodiments. Modification within the spirit of the invention will be apparent to those skilled in the art.

Industrial Applicability

One advantage of the method and system for providing a real-time counseling service by using a network is that it can determine the proper counselor corresponding with the query-contents and the language of a user's query concerning such things as counseling, data retrieval, or a purchase from an e-business.

Another advantage of the method and system for providing real time counseling service by using network the user and the counselor may engage in interactive counseling in the same counseling room in real time.

Still another advantage of the method and system for providing real time counseling service by using network is that it analyzes queries (regarding purchases from electronic business, counseling, information retrieval, etc.) in order to generate an identification code for the user, which will include at least one selected from the group

consisting the language information, the contents-providing server's information, the query-contents identification, the user's location information, the counseling server's information, or the service-providing server's information.

Still another advantage of the method and system for providing real time
5 counseling service by using network is that this method and system may take greater
advantage of the interactivity and communication speed that are principal advantages of
the Internet.

Still another advantage of the method and system for providing real time
counseling service by using network is that this method and system may increase the
10 efficiency of counseling because the user and the professional counselor are able to engage
in interactive counseling.

Still another advantage of the method and system for providing real time
counseling service by using network is that the user may conduct electronic business by
directly linking with electronic business malls related to queries that he/she makes in a
15 counseling room during counseling.

Still another advantage of the method and system for providing real time
counseling service by using network is that this method and system may overcome
language barriers because a user can be linked to a counselor who is able to communicate
in the same language used in a query.

Claims

1. A method for providing a real-time counseling service by using a network, comprising the steps of:

5 receiving a query from a user;

generating an identification code corresponding with said query;

determining a counselor using said identification code;

creating a counseling room in which said user and said counselor are able to engage in interactive counseling,

10 wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification and a user's location information.

15 2. The method for providing a real-time counseling service by using a network of claim 1, wherein said language information is the language corresponding to said query.

20 3. The method for providing a real-time counseling service by using a network of claim 1, wherein said service-providing server's information is a domain name (URL) of the service-providing server.

4. The method for providing a real-time counseling service by using a network of claim 1, wherein said query-contents identification is a query-contents category number that said query belongs to among a plurality of query-contents

categories.

5. The method for providing a real-time counseling service by using a network of claim 1, wherein said user's location information is a user's connection control information.

10. The method for providing a real-time counseling service by using a network of claim 1, wherein said step of determining a counselor using said identification code is the step of determining a counselor using said language information and said query-contents identification.

15. The method for providing a real-time counseling service by using a network of claim 1, wherein said counseling room is a cyber space in which said user and said counselor are able to engage in interactive counseling by using said query and said identification code in real time.

20. The method for providing a real-time counseling service by using a network of claim 1 or 7, wherein said counseling room is a chat room, where said chat room corresponds with said query and said user is able to carry on electronic business (e-business) by using URLs of electronic business malls that are provided in said chat room.

9. A method for providing data for creating a counseling room at a service-providing server, where said service-providing server is coupled with a counseling

server that provides a user with said counseling room by using a network, said method comprising the steps of:

receiving a query from said user;

generating an identification code corresponding with said query;

5 transmitting said query and said identification code to said counseling server, where said counseling server determines a counselor using said identification code and creates a counseling room for counseling between said user and said counselor, wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a 10 query-contents identification, a user's location information and a counseling-server's information.

15 10. The method for providing data for creating a counseling room by using a network of claim 9, wherein said language information is the language corresponding with said query.

11. The method for providing data for creating a counseling room by using a network of claim 9, wherein said service-providing server's information is a domain name (URL) of the service-providing server.

20

12. The method for providing data for creating a counseling room by using a network of claim 9, wherein said query-contents identification is a query-contents category number that said query belongs to among a plurality of query-contents categories.

13. The method for providing data for creating a counseling room by using a network of claim 9, wherein said user's location information is a user's connection control information.

5

14. The method for providing data for creating a counseling room by using a network of claim 9, wherein to determine a counselor using said identification code is to determine a counselor using said language information and said query-contents identification.

10

15. The method for providing data for creating a counseling room by using a network of claim 9, wherein said counseling room is a cyber space in which said user and said counselor are able to engage in interactive counseling by using said query and said identification code in real time.

15

16. The method for providing data for creating a counseling room by using a network of claim 9 or 15, wherein said counseling room is a chat room, where said chat room corresponds with said query and said user is able to carry on electronic business (e-business) by using URLs of electronic business malls that are provided in said chat room.

20

17. A method for providing a user with a counseling room at a counseling server, where said counseling server is coupled with a service-providing server by using a network, said method comprising the steps of:

receiving a query and an identification code from said service-providing server, where said query has been received from said user by said service-providing server and said identification code is generated at said service-providing server corresponding with said query;

5 determining a counselor using said identification code;

creating a counseling room in which said user and said counselor are able to engage in interactive counseling,

wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification, a user's location information and a counseling server's information.

10

15

18. The method for providing a user with a counseling room by using a network of claim 17, wherein said language information is the language corresponding with said query.

19. The method for providing a user with a counseling room by using a network of claim 17, wherein said service-providing server's information is a domain name (URL) of the service-providing server.

20

20. The method for providing a user with a counseling room by using a network of claim 17, wherein said query-contents identification is a query-contents category number that said query belongs to among a plurality of query-contents categories.

21. The method for providing a user with a counseling room by using a network of claim 17, wherein said user's location information is a user's connection control information.

5

22. The method for providing a user with a counseling room by using a network of claim 17, wherein said step of determining a counselor using said identification code is the step of determining a counselor using said language information and said query-contents identification.

10

23. The method for providing a user with a counseling room by using a network of claim 17, wherein said counseling room is a cyber space in which said user and said counselor are able to engage in interactive counseling by using said query and said identification code in real time.

15

24. The method for providing a user with a counseling room by using a network of claim 17 or 23, wherein said counseling room is a chat room, where said chat room corresponds with said query and said user is able to carry on electronic business (e-business) by using URLs of electronic business malls that are provided in said chat room.

20

25. An apparatus for providing a real-time counseling service by using a network, comprising:
receiving means for receiving a query from a user;

controlling means for generating an identification code corresponding with said query, determining a counselor using said identification code and creating a counseling room in which said user and said counselor are able to engage in interactive counseling,

5 wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification and a user's location information.

10 26. An apparatus for providing data for creating a counseling room, where said apparatus is coupled with a counseling server that provides a user with said counseling room by using a network, said apparatus comprising:

receiving means for receiving a query from said user;
generating means for generating an identification code corresponding with said query;

15 transmitting means for transmitting said query and said identification code to said counseling server, where said counseling server determines a counselor using said identification code and creates a counseling room in which said user and said counselor are able to engage in interactive counseling;

20 wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification, a user's location information and a counseling server's information.

27. An apparatus for providing a user with a counseling room, where said

apparatus is coupled with a service-providing server by using a network, said apparatus comprising:

5 receiving means for receiving a query and an identification code from said contents-providing server, where said query has been received from said user by said service-providing server and said identification code is generated at said service-providing server corresponding with said query;

controlling means for determining a counselor using said identification code, creating a counseling room in which said user and said counselor are able to engage 10 in interactive counseling, wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification, a user's location information and a counseling server's information.

28. An apparatus for providing a real-time counseling service by using a 15 network, comprising:

a storage device; and

a processor coupled to said storage device,

said storage device storing

a program for controlling said processor; and

20 said processor operative with said program to receive a query from a user;

generate an identification code corresponding with said query;

determine a counselor using said identification code;

create a counseling room in which said user and said counselor are able to engage 25 in interactive counseling,

wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification and a user's location information.

5 29. An apparatus for providing data for creating a counseling room, where said apparatus is coupled with a counseling server that provides a user with said counseling room by using a network, said apparatus comprising:

10 a storage device; and

 a processor coupled to said storage device,

 said storage device storing

 a program for controlling said processor; and

 said processor operative with said program to receive a query from said user;

 generate an identification code corresponding with said query;

 transmit said query and said identification code to said counseling server, where

15 said counseling server determines a counselor using said identification code and generates a counseling room in which said user and said counselor are able to engage in interactive counseling;

 wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a query-contents identification, a user's location information and a counseling server's information.

20 30. An apparatus for providing a user with a counseling room, where said apparatus is coupled with a service-providing server by using a network, said

apparatus comprising:

a storage device; and

a processor coupled to said storage device,

said storage device storing

5 a program for controlling said processor; and

said processor operative with said program to receive a query and an identification code from said service-providing server, where said query has been received from said user by said contents-providing server and said identification code is generated at said service-providing server corresponding to said query;

10 determine a counselor using said identification code;

create a counseling room in which said user and said counselor are able to engage in interactive counseling,

wherein said identification code includes at least one selected from the group consisting of a language information, a service-providing server's information, a

15 query-contents identification, a user's location information and a counseling server's information.

31. A method for providing a real-time counseling service at a contents-providing server by using a network, comprising the steps of:

20 providing at least one page in a site corresponding with said contents-providing server, having at least one counseling link;

when said counseling link is selected by a user, generating an identification code corresponding with said counseling link;

transmitting said identification code to a counseling server corresponding with said

counseling link,

wherein said counseling server determines a counselor using said identification code and provides a counseling room in which said user and said counselor are able to engage in interactive counseling.

5

32. The method for providing a real-time counseling service at a contents-providing server by using a network of claim 31, wherein said identification code includes at least one selected from the group consisting of a language information, a contents-providing server's information, a category information and a counseling server's information.

10

33. The method for providing a real-time counseling service at a contents-providing server by using a network of claim 32, wherein said identification code further includes user-related information.

15

34. A method for providing a real-time counseling service by using a network, comprising the steps of:
receiving an identification code corresponding with a counseling link selected by a user from a contents-providing server, wherein said identification code includes at least one selected from the group consisting of a language information, a contents-providing server's information, a category information and a counseling server's information;
determining a counselor using said identification code;
creating a counseling room in which said user and said counselor are able to engage

in interactive counseling.

35. The method for providing a real-time counseling service by using a network of claim 34, said method further comprises the steps of:

5 retrieving a basic counseling information using said identification code; providing said user with said basic counseling information.

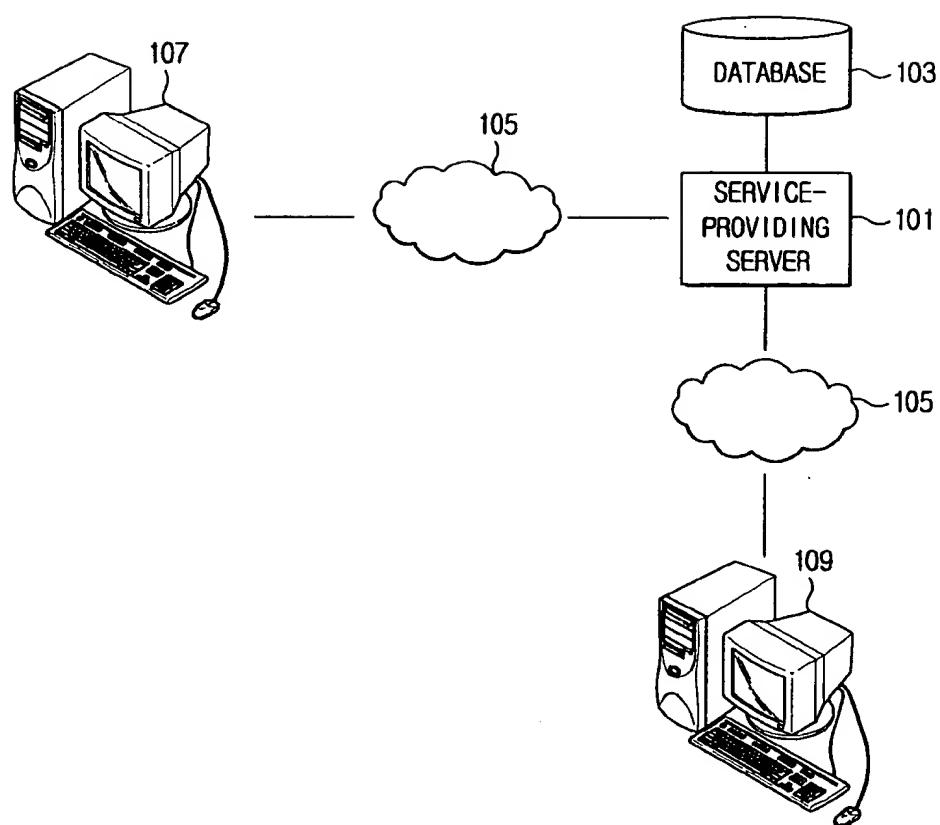
10 36. The method for providing a real-time counseling service by using a network of claim 35, wherein a chatting service is provided, where said chatting service is based on at least one selected from the group consisting of text, voice, picture board and picture.

15 37. The method for providing a real-time counseling service by using a network of claim 35, said method further comprises the steps of: receiving a help request and a help contents from said user; determining a professional counselor using said help contents; linking said professional counselor with said counseling room; transmitting at least said basic counseling information to said professional counselor.

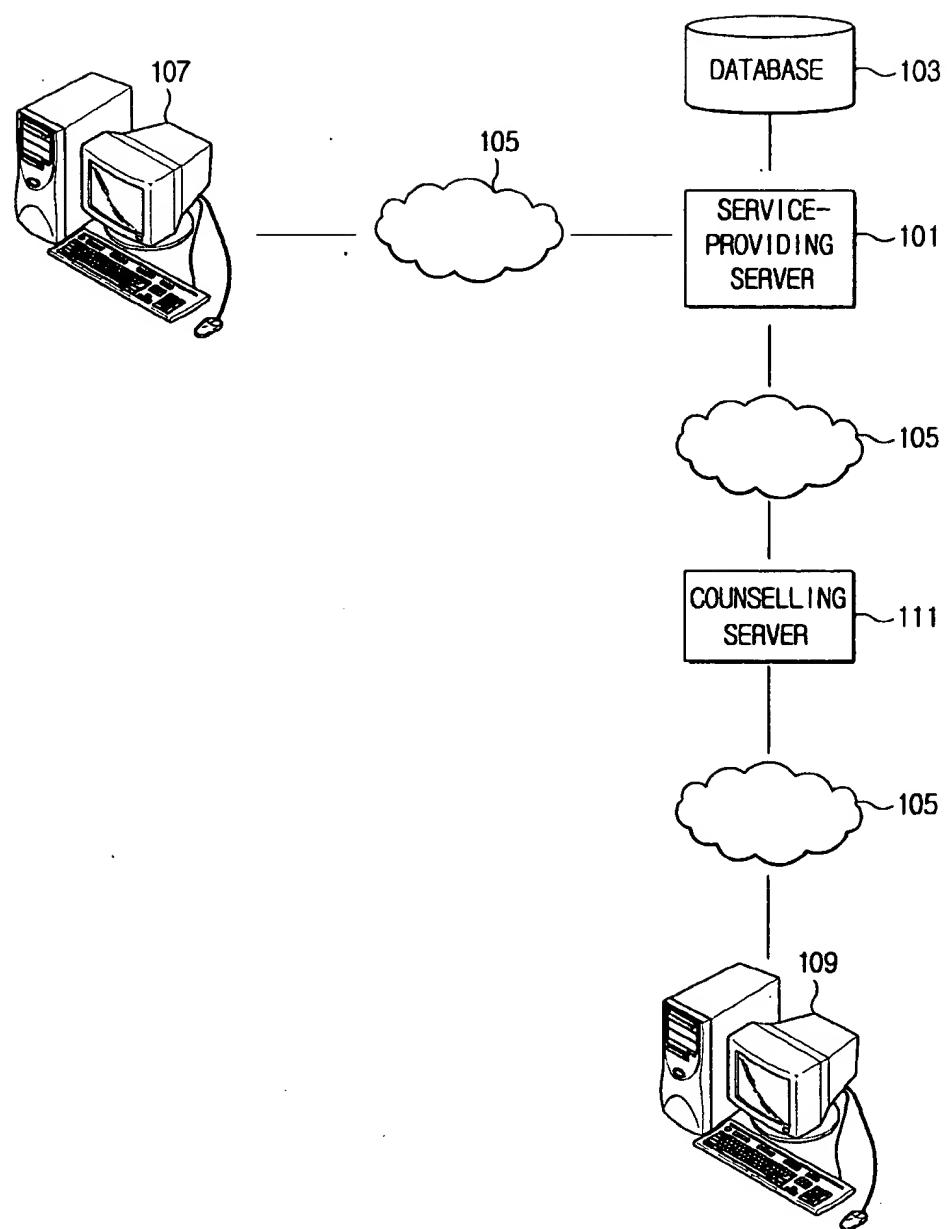
20

1/14

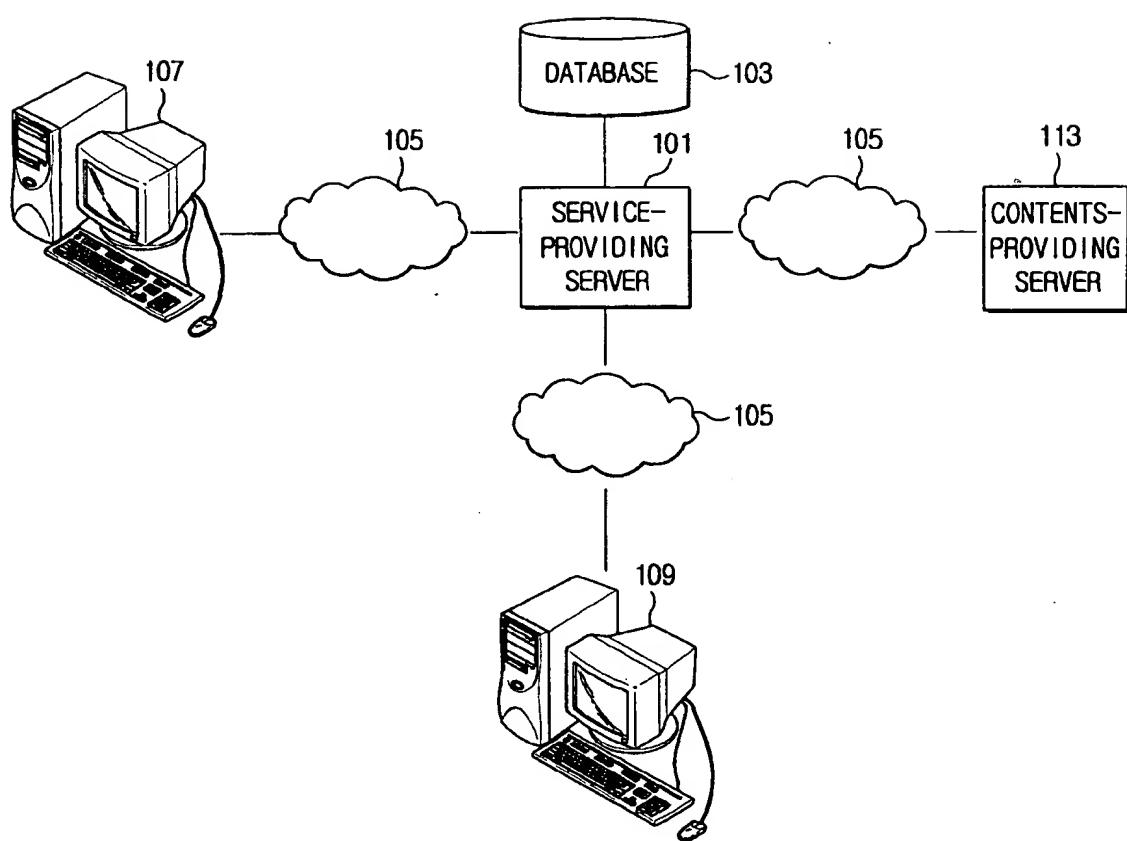
FIG. 1A



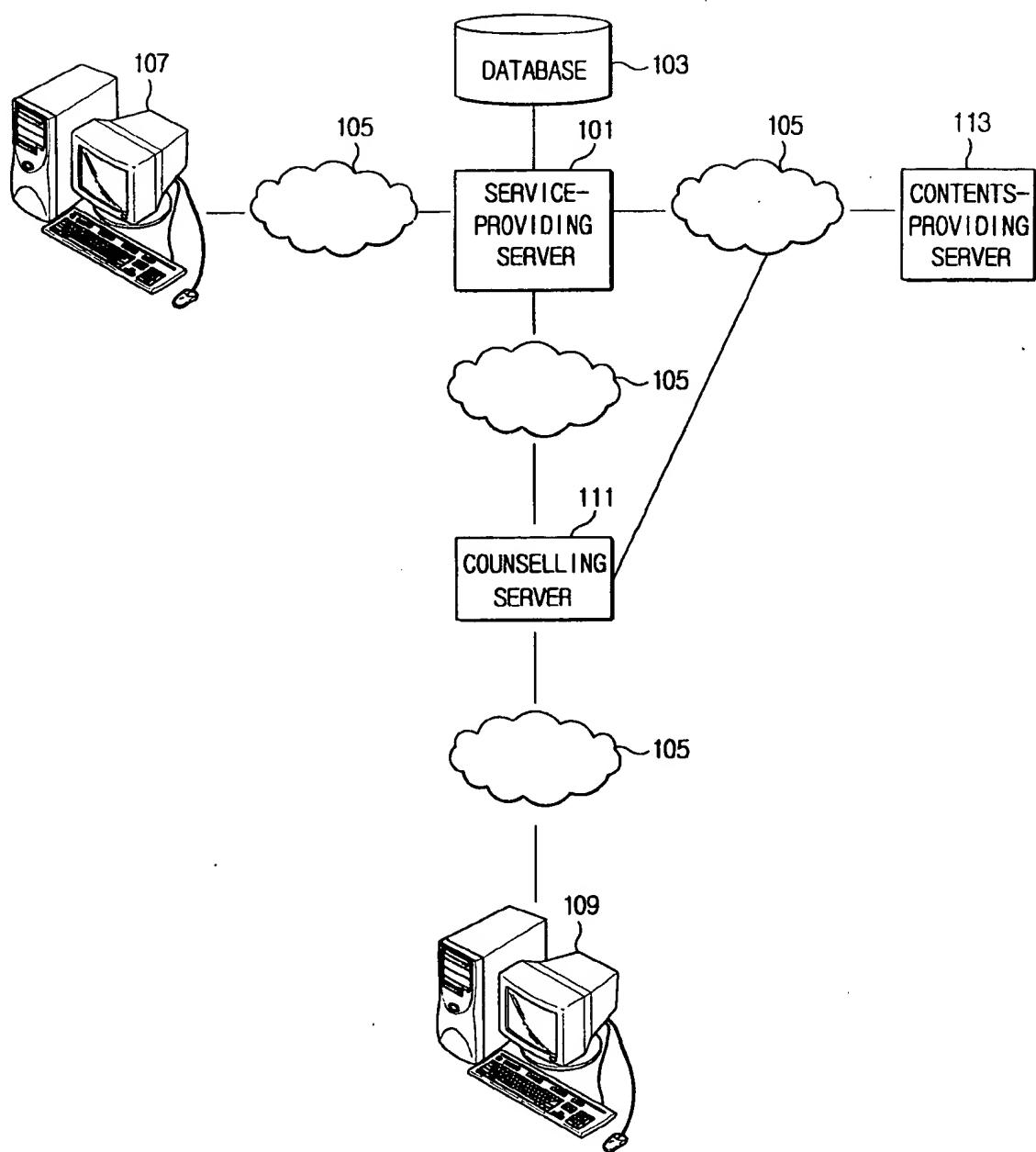
2/14
FIG. 1B



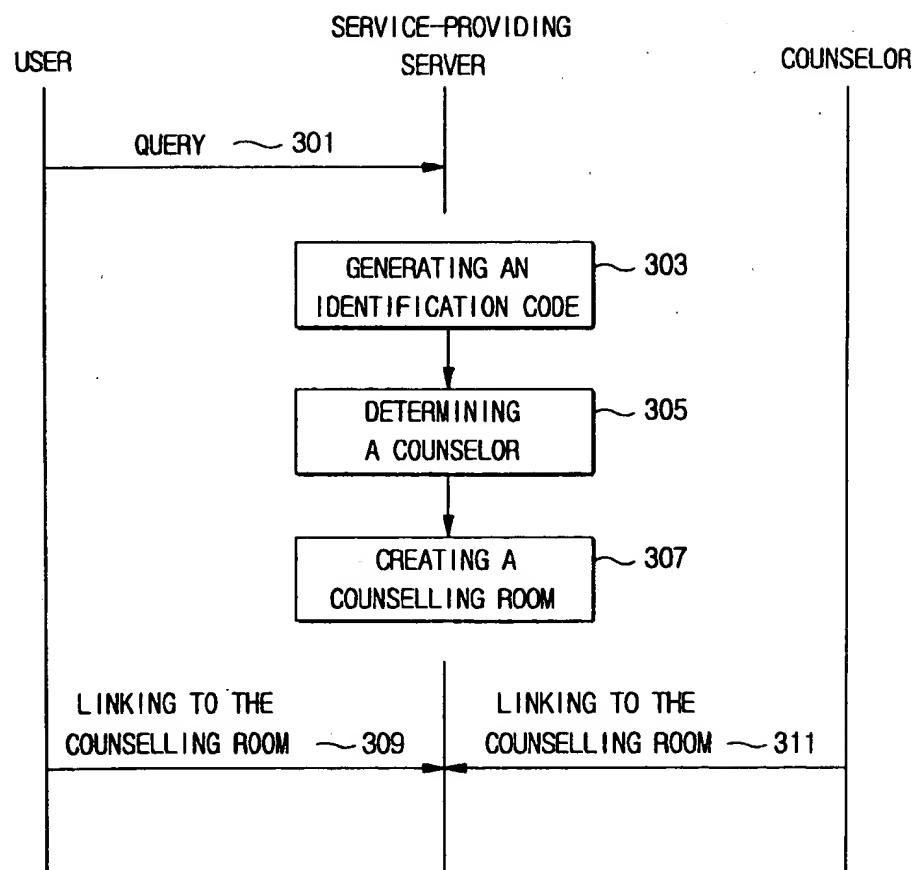
3/14
FIG.2A



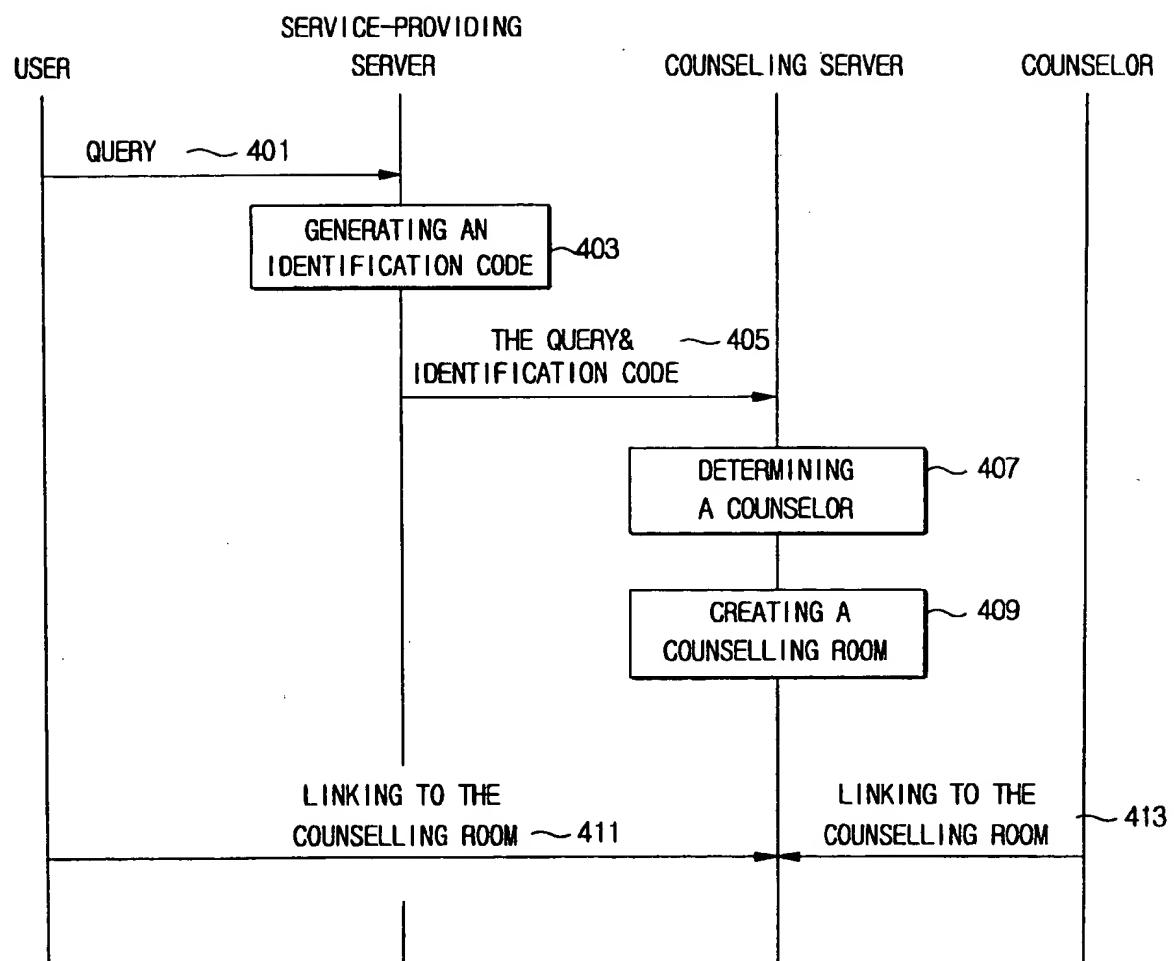
4/14
FIG.2B



5/14
FIG.3



6/14
FIG.4



7/14

FIG. 5A

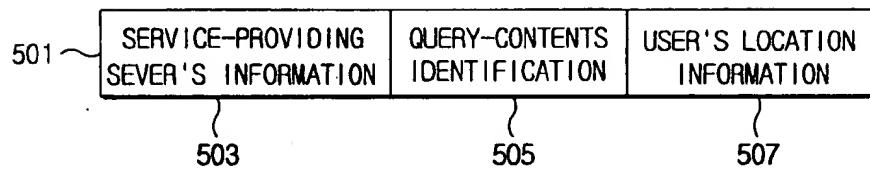
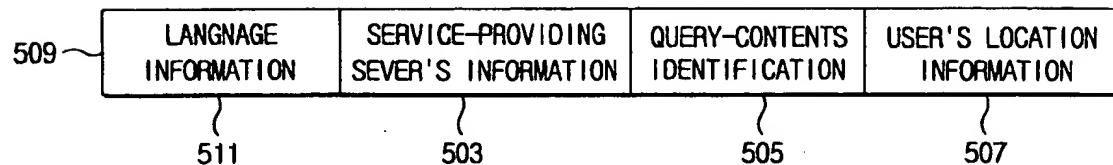
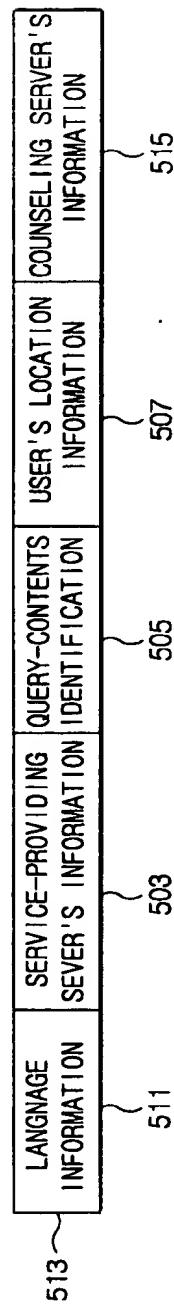


FIG. 5B



8/14
FIG.5C



9/14
FIG.50

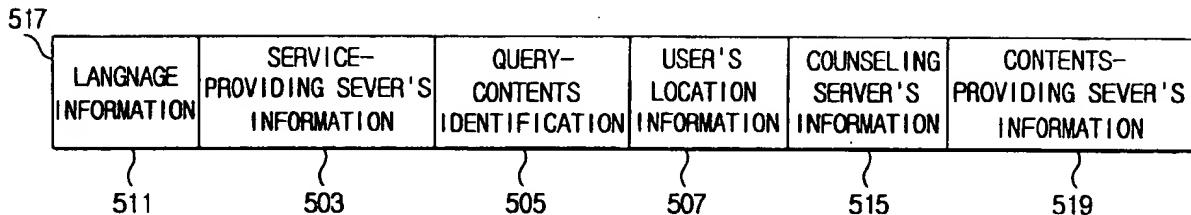
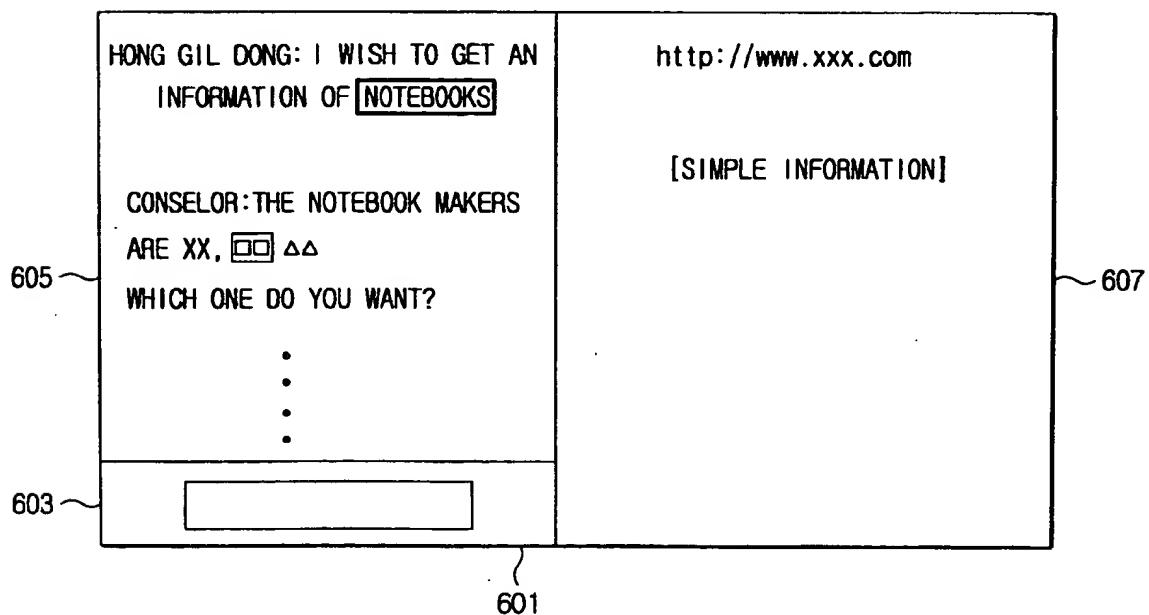
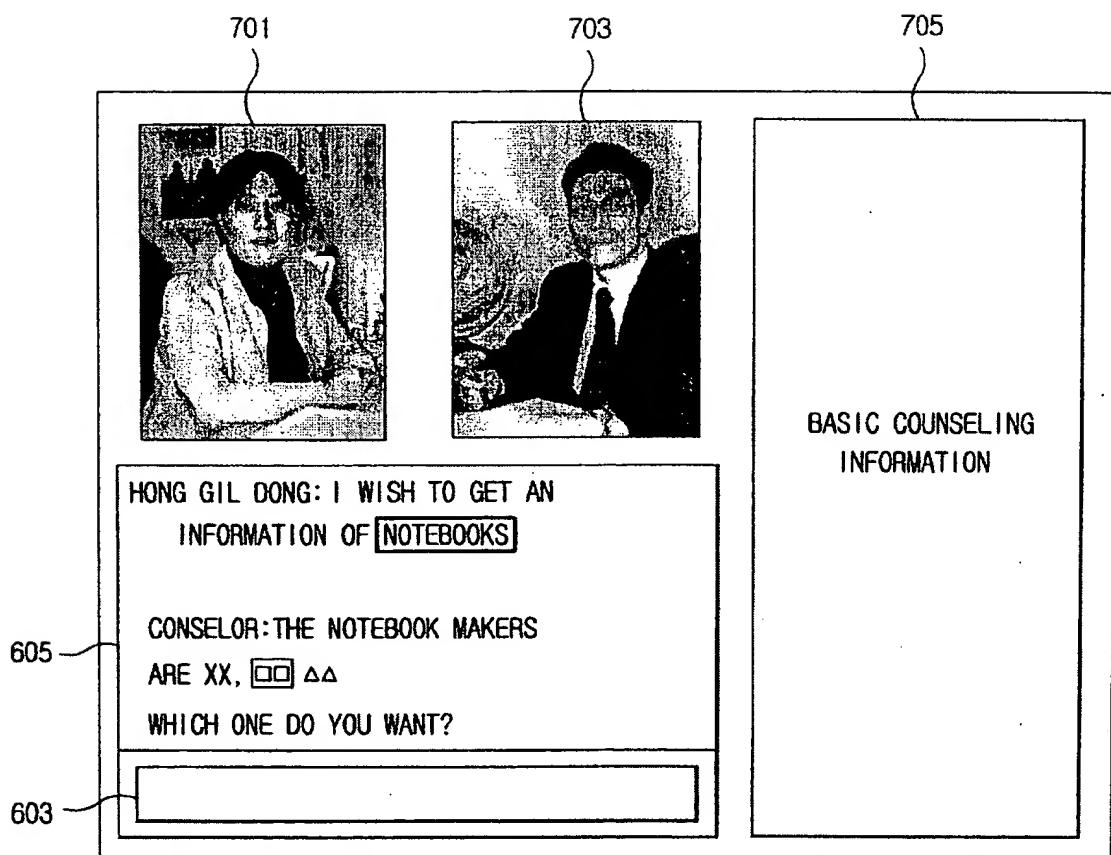


FIG.6



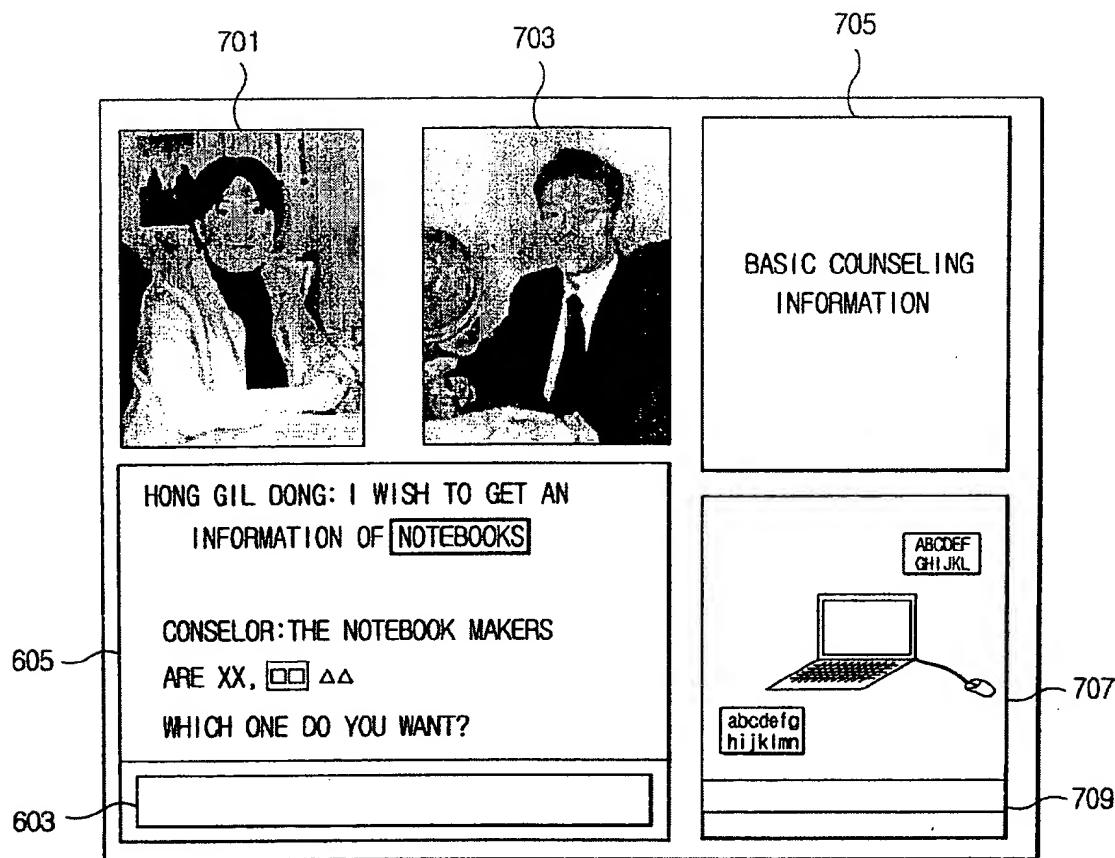
10/14

FIG.7



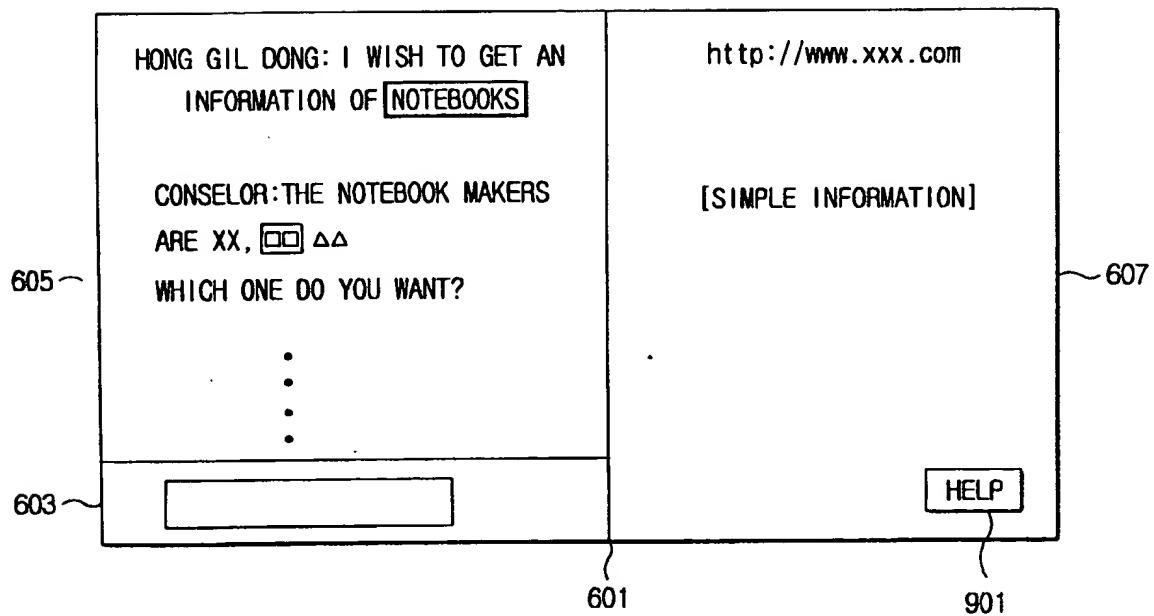
11/14

FIG.8

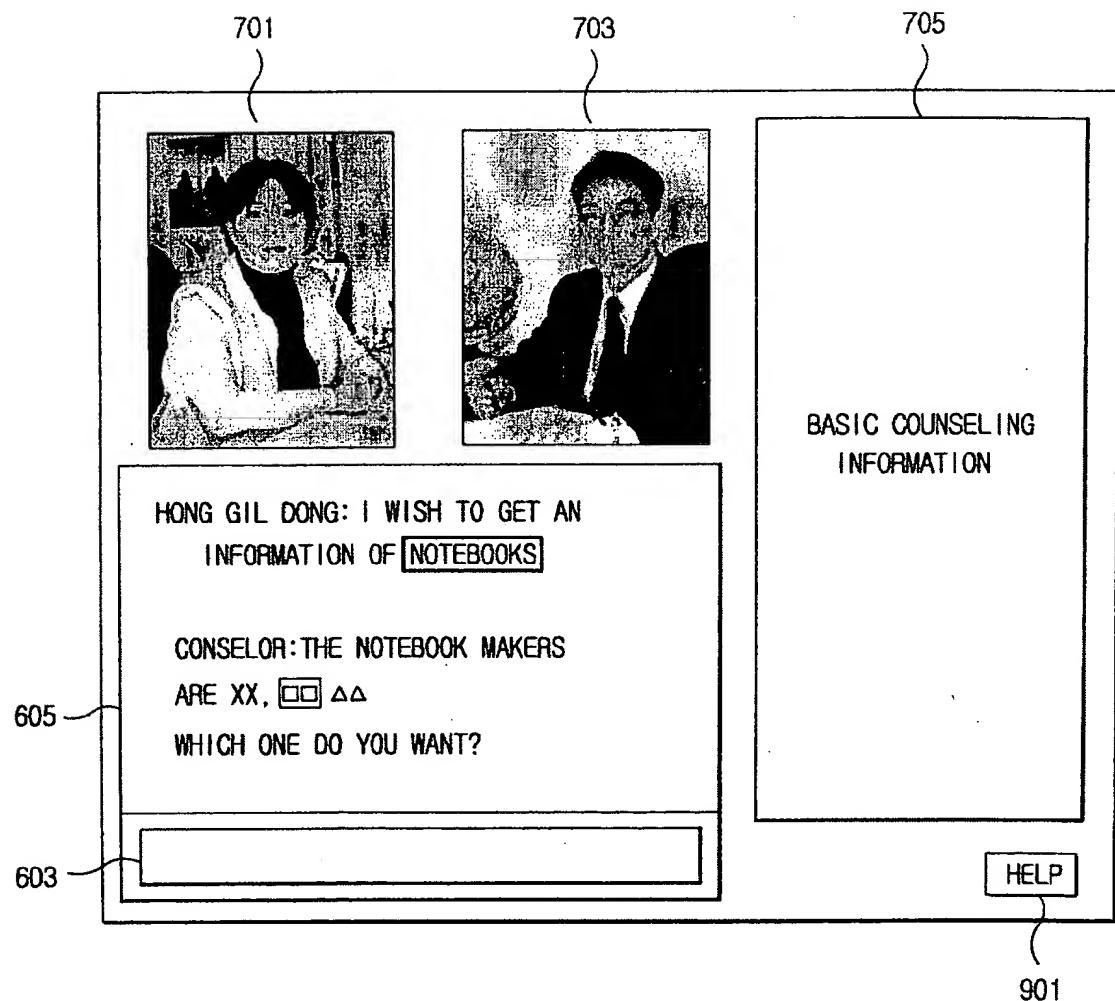


12/14

FIG.9

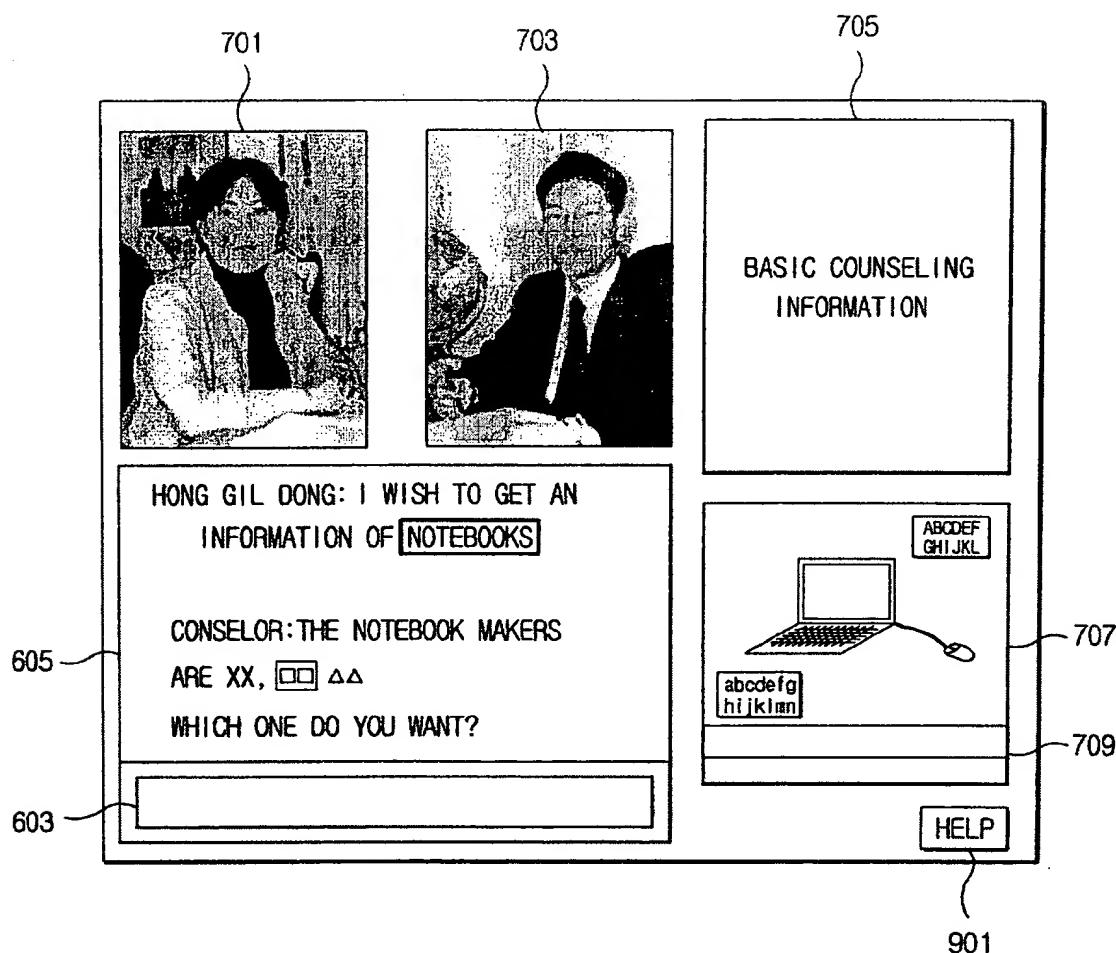


13/14
FIG. 10



14/14

FIG.11



INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR00/00794

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 G06F 17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 G06F 17/60, 13/00, IPC6 H04N 7/14

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 07-85164 A (BORDERLESS HUMAN CENTER) 31, MARCH, 1995 FIG 1, 2, 3, 4, ABSTRACT, CLAIMS 1	1-37
A	JP 11-137719 A (MATSUSITA CO.) 25, MAY, 1999 FIG 1, 2, 3, 4, 7-10, ABSTRACT, CLAIMS 1	1-37
A	JP 07-74844 A (MATSUSITA) 17, MARCH, 1995 FIG 1, 2, 3, 4, 7-9, 11-17, ABSTRACT, CLAIMS 1-10	1-37
P	JP 11-289523 A (SUMITOMO ELECTRIC CO.) 19, OCTOBER, 1999 FIG 19, 24, ABSTRACT, CLAIMS 1-5	1

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

30 OCTOBER 2000 (30.10.2000)

Date of mailing of the international search report

31 OCTOBER 2000 (31.10.2000)

Name and mailing address of the ISA/KR

Korean Industrial Property Office
Government Complex-Taejon, Dunsan-dong, So-ku, Taejon
Metropolitan City 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

LEE, Un Cheol

Telephone No. 82-42-481-5784

